

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

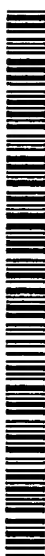


(43) International Publication Date
14 November 2002 (14.11.2002)

PCT

(10) International Publication Number
WO 02/090653 A3

- (51) International Patent Classification: **D21H 21/16** // 17:06, 17:17, 17:35, 21/24
- (74) Agent: **RIGLER, Johann**; Eka Chemicals AB, Patent Department, P.O. Box 11556, S-100 61 Stockholm (SE).
- (21) International Application Number: **PCT/SE02/00859**
- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW.
- (22) International Filing Date: **3 May 2002 (03.05.2002)**
- (25) Filing Language: **English**
- (26) Publication Language: **English**
- (30) Priority Data:
60/289,347 8 May 2001 (08.05.2001) US
01850086.8 9 May 2001 (09.05.2001) EP
- (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- (71) Applicant (*for all designated States except US*): **AKZO NOBEL N.V.** [NL/NL]; Velperweg 76 / 6824 BM, NL-6800 SB Arnhem (NL).
- (71) Applicant (*for SE only*): **EKA CHEMICALS AB** [SE/SE]; S-445 80 Bohus (SE).
- (72) Inventors; and
- (75) Inventors/Applicants (*for US only*): **HOLMBERG, Krister** [SE/SE]; Rosengatan 1, S-413 10 Göteborg (SE). **LEIJON, Håkan** [SE/SE]; Torsgatan 2A, S-314 34 Hyltebruk (SE). **MOHLIN, Kristina** [SE/SE]; Götaholmsgatan 14B, S-415 01 Göteborg (SE).
- Published:
— with international search report
- (88) Date of publication of the international search report:
1 May 2003
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.



WO 02/090653 A3

(54) Title: **SIZING DISPERSION**

(57) Abstract: The present invention refers to an essentially water-free sizing composition and an aqueous sizing dispersion comprising a sizing agent, a non-ionic surfactant, an anionic surfactant and a monohydric alcohol. The invention also relates to a method for producing an aqueous dispersion comprising the above components and the use of the dispersion for surface and stock sizing.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/SE 02/00859

A. CLASSIFICATION OF SUBJECT MATTER

IPC7: D21H 21/16 // D21H 17:06, D21H 17:17, D21H 17:35; D21H 21/24
According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: D21H

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	GB 2122659 A (SANYO CHEMICAL INDUSTRIES LTD), 18 January 1984 (18.01.84), page 1, line 14 - line 33; page 2; page 8, line 28 - line 43 --	1-15
Y	US 5059675 A (CARLIN ET AL), 22 October 1991 (22.10.91), abstract and example III, especially column 3, lines 64-66 --	1-15
Y	WO 9749865 A1 (BUCKMAN LABORATORIES INT), 31 December 1997 (31.12.97), page 9, line 17 - line 19 --	1-2,6-12, 14-15



Further documents are listed in the continuation of Box C.



See patent family annex.

*

Special categories of cited documents

"A"

document defining the general state of the art which is not considered to be of particular relevance

"E"

earlier application or patent but published on or after the international filing date

"L"

document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O"

document referring to an oral disclosure, use, exhibition or other means

"P"

document published prior to the international filing date but later than the priority date claimed

"T"

later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X"

document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y"

document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&"

document member of the same patent family

Date of the actual completion of the international search

29 August 2002

Date of mailing of the international search report

04-09-2002

Name and mailing address of the ISA/

Swedish Patent Office

Box 5055, S-102 42 STOCKHOLM

Facsimile No. +46 8 666 02 86

Authorized officer

Marie Karlsson/EK

Telephone No. +46 8 782 25 00

INTERNATIONAL SEARCH REPORT

International application No.

PCT/SE 02/00859

Patent document cited in search report			Publication date	Patent family member(s)		Publication date
GB	2122659	A	18/01/84	CA	1196453 A	12/11/85
				GB	8315150 D	00/00/00
				JP	58220897 A	22/12/83
				SE	459740 B,C	31/07/89
				SE	8303155 A	12/12/83
				US	4529447 A	16/07/85
				JP	1023599 B	08/05/89
				JP	1887138 C	22/11/94
				JP	59030993 A	18/02/84

US	5059675	A	22/10/91	NONE		

WO	9749865	A1	31/12/97	AU	720443 B	01/06/00
				AU	3491297 A	14/01/98
				BR	9709950 A	10/08/99
				CA	2259227 A	31/12/97
				EP	0907799 A	14/04/99
				JP	2000514143 T	24/10/00
				NZ	333887 A	29/09/00
				US	5962555 A	05/10/99

WO	0159214	A1	16/08/01	AU	3257501 A	20/08/01
				EP	1171193 A	16/01/02
				SE	0000449 A	15/08/01

EP	0984101	A1	08/03/00	FI	109218 B	00/00/00
				FI	981893 A	05/03/00

US	4376177	A	08/03/83	DE	3048679 A	29/10/81
				JP	56091075 A	23/07/81
